



# **COURSE SPECIFICATION**

# Faculty of Medicine-Mansoura University

# (A) Administrative information

| (1) Programme offering the course.                                      | MD Degree of Industrial Medicine and Occupational Health                          |
|---|---|
| (2) Department offering the programme.                                  | Public health and community medicine department                                   |
| (3) Department responsible for teaching the course:                     | Public health and community medicine department                                   |
| (4) Part of the programme.  | First Part  |
| (5) Date of approval by the Department's council                        |   |
| (6) Date of last approval of programme specification by Faculty council | 9/8/2016  |
| (7) Course title:   | Principles of Occupational & Environmental Medicine & Research Methodology (Adv.) |
| (8) Course code:  | PHPM 618 POEM-RM  |
| (9) Credit hours  | 2 Cr. hours   |
| (10) Total teaching hours.  | 30h lectures  |

| (B) <u>Pr</u>   | ofessional informat                 | ion_                 |                          |                       |
|-----------------|-------------------------------------|----------------------|--------------------------|-----------------------|
| (1)<br>The broa | Course Aims: d aims of the course a | are as follows: (eit | ner to be written in ite | ms or as a paragraph) |
| _               | port acquisition of line            | _                    | _                        | _                     |
|                 |                                     |                      |                          |                       |
|                 |                                     |                      |                          |                       |

## (2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories. knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

### (1) A- Knowledge and Understanding

- A1: Recognize Occupational Medicine as a distinct clinical medical specialty.
- A2: Describe the functions of the Occupational Medicine/ Health Physician.
- A3: Understand the basic structure of Occupational Health Services Program.
- A4: Identify work needs of women, children, and vulnerable groups.
- A5: Recognize medical ethics pertinent to Occupational and Environmental Medicine.
- A6: Understand how to conduct research work and how to use Medical Biostatistics.

### 2- Intellectual activities (I)

The Postgraduate Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities:

#### B- Intellectual skills

- B1: Illustrate functions of occupational medicine physician in exemplary industries and workplaces.
- B2: Design occupational health services program to varying-scale industries.
- B3: Propose solutions to problems of women employment and child labor.
- B4: Practise Medical ethics in diverse occupational medicine scenarios.
- B5: Choose suitable epidemiologic methods to solve occupational health problems.
- B6: Choose suitable statistical tests for analysis of data sets.

#### C- Communication & Transferable skills

- D1: Learn teaching and learning skills.
- D2: Design and deliver a teaching event/ or short course.
- D3: Identify Intended learning outcomes of a teaching event.
- D4: Teach large and small groups effectively.
- D5: Select and use appropriate teaching resources.
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## Course content:

| Subjects   | Lectures | Practical |
|--|----------|-----------|
| First Topic: Principles of Occupational and Environmental Medicine (POEM).  (1)Introduction to Occupational and Environmental Medicine (OEM).  Clinical and Public Health Aspects.  (2)Historical background of OEM (National and international).  (3)Introduction to Occupational Health Services.  Principles of Clinical Practice of OEM.   | 20 hrs   |           |
| <ul> <li>(4)Introduction to Occupational Health Services.     Diagnosis and Patient Management.</li> <li>(5)Occupational Health Surveillance.</li> <li>(6)Introduction to Clinical Toxicology in OEM.</li> <li>(7)Role of Epidemiology in OEM.</li> <li>(8)Introduction to Impairment and Disability in OEM.</li> <li>(9)Principles of Auditing and Quality Improvement in OEM.</li> <li>(10)Principles of Occupational Hygiene.</li> <li>(10.1) Principles of Occupational Hazard Recognition.</li> </ul> |          |           |
| Computerized Database and Internet Resources.  (10.2) Principles of Occupational Hazard Evaluation.  (10.3) Principles of Occupational Hazard Control.  (11) Principles of Molecular Biology in OEM.  (12)Occupational Health Services Program in Developing Countries.  (13)Occupational Health Services Program in Rapidly-industrialized Countries and Developed Countries.  (14)Occupational Medicine Program to Agricultural Workers (Illustrating example).  |          |           |

| (15)Occupational Medicine Program to Health Care Workers (Illustrating example). |         |  |
|--|---------|--|
| (16)Medical Ethics in OEM .  |         |  |
| (16.1)Conflicts of interest in Occupational Medicine.                            |         |  |
| (16.2)Patient confidentiality.   |         |  |
| (16.3)Ethics of Occupational Health Research.                                    |         |  |
| (16.4)Codes of Ethics in Occupational Medicine.                                  |         |  |
| (16.5)Ethical aspects of genetic testing in the workplace.                       |         |  |
| (16.6)Ethical aspects of drug testing in the workplace.                          |         |  |
| Second Topic: Biostatistics and Research Methodology (RM).                       |         |  |
| (1) Introduction to Advanced Medical Biostatistics.                              |         |  |
| (2) Regression Methods (Simple) / (Multiple).                                    | 10 hrs  |  |
| (3) Regression (Logistic).   | 10 1113 |  |
| (4) Regression (Modeling).   |         |  |
| (5) Longitudinal studies: Repeated measures.                                     |         |  |
| (6) Assessing Evidence: Evidence-based Medicine.                                 |         |  |
| (7) Assessing Evidence: Systematic Reviews and Meta-analysis.                    |         |  |
| (8) Diagnostic Tools: Sensitivity/ Specificity.                                  |         |  |
| (9) Diagnostic Tools: Agreement (Kappa).   |         |  |
| (10) Other subjects.   |         |  |

- (2) Teaching methods.
- 4.1... Lectures
- **4.2:** ... Seminars
- **4.3**: ... Tutorial
- 4.4: ... Workshops
- (3) Assessment methods:
- 5.1 Written exam for assessment of knowledge and intellectual ILOs
- 5.2 MCQ exam for assessment of intellectual ILOs

#### Assessment schedule:

Assessment 1: MCQ.....at the end of semester (15th week)

Assessment 2: Written exam after 6 months from registration for MD degree.

# Percentage of each Assessment to the total mark:

Written: 80 Marks

MCQ: 20 Marks

## (4) References of the course:

- 6.1. Handouts of lectures and handbooks authorized by the department.
- 6.2. Text books:
  - o **Environmental and Occupational Medicine** (4<sup>th</sup> ed.) by William N. Rom.
  - Textbook of Clinical Occupational and Environmental Medicine (2<sup>nd</sup> ed.) by Cullen M and Rosenstock L.
  - Pocket Consultant of Occupational Health, UK.
  - o **Text book of Public Health**, Maxcy Roseneau (Wallace, 14<sup>th</sup> ed).
- **6.3.** Journals.... Publications of national and international Occupational and Environmental Medicine Associations: Egyptian Society of Occupational and Environmental Medicine Journal, American College of Occupational and Environmental Medicine Journal (OEM), OSHA and NIOSH publications, ILO publications.

#### 6.4. Websites.

http://www.ilo.org/safework\_bookshelf/english?d&nd=170000102&nh=0 http://www.niosh.com + http://www.acoem.com

(5) Facilities and resources mandatory for course completion:

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|--|--|
| Candidates and their learning are supported in a number of ways: |  |
| □ Induction course introducing study skills                      |  |
| □ Candidates logbook   |  |
| □ Programme Specification and Handbooks                          |  |
| □ Extensive library and other learning resources                 |  |
| □ Computer laboratories with a wide range of software            |  |

☐ Intranet with a wide range of learning support material

☐ Ph.D Dissertation Supervisor

□ Others

**Course coordinator:** Prof. Emily kamel, Prof. Adel El-Weheidi, Dr. Nabil Joseph, Dr. Hala Samir

Head of the department: Prof. Mohamed Azmy Khafagy

Date:

P.S. This specification must be done for each course.